REMARKS

The Office Action dated September 30, 2005, and Advisory Action dated November 22, 2005, have been received and carefully noted. The above amendments to the claims and the following remarks are submitted as a full and complete response thereto.

Each of claims 1, 10, and 13 has been amended to clarify an aspect of the present invention and more particularly point out and distinctly claim the invention. The amendments to claims 1, 10, and 13 are supported by the specification as originally filed. Accordingly, no new matter has been added. Claims 1-15 are respectfully submitted for consideration.

Claims 1-15 had been rejected twice under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,625, 46 of Merchant et al. ("Merchant") in view of U.S. Patent No. 6,625,146 of Denio et al. ("Denio"). Applicants respectfully submit that this rejection is moot in view of Applicants' clarifying amendments.

Claim 1 is directed to a network switch for network communications. The network switch includes a first data port interface supporting a plurality of data ports transmitting and receiving data at a first data rate, a second data port interface supporting a plurality of data ports transmitting and receiving data at a second data rate, a CPU interface configured to communicate with a CPU, an internal memory communicating with the first data port interface and the second data port interface, a memory

management unit including an external memory interface for communicating data from at least one of the first data port interface and the second data port interface and an external memory and a communication channel communicating data and messaging information between the first data port interface, the second data port interface, the CPU interface, the internal memory, and the memory management unit. One data port interface of the first data port interface and the second data port interface includes a fast filtering processor filtering the data coming into the one data port interface and taking selective filter action based upon a filtering result. The one data port interface further includes a flow monitor for monitoring flows of data through the network switch, where a flow of the flows of data is defined by a combination of a source address and a destination address for a portion of the data passing through the network switch. Monitoring flows of data includes associating a particular packet with a previously identified flow if the particular packet has both the source address and the destination address of the flow. Claims 2-9 depend from claim 1.

Claim 10 is directed to a method of handling data packets in a network switch. The method includes the steps of placing incoming packets into an input queue, applying the input data packets to an address resolution logic engine, performing a lookup to determine whether certain packet fields are stored in a lookup table and determining index values for the input data packets, filtering the incoming packet through a fast filtering processor in order to determine what specific actions should be taken to modify the packet for further handling and discarding, forwarding, or modifying the packet based

upon the filtering. The index values are used by the fast filtering processor to rapidly find an indexed specific action of the specific actions. Monitoring flows of data includes associating a particular packet with a previously identified flow if the particular packet has both the source address and the destination address of the flow. Claims 11 and 12 depend from claim 10.

Claims 13 is directed to a network switch for handling data packets including means for placing incoming packets into an input queue, means for applying the input data packets to an address resolution logic engine, means performing a lookup to determine whether certain packet fields are stored in a lookup table and means for determining index values for the input data packets, means for filtering the incoming packet through a fast filtering processor in order to determine what specific actions should be taken to modify the packet for further handling and means for discarding, forwarding, or modifying the packet based upon the filtering. Monitoring flows of data includes associating a particular packet with a previously identified flow if the particular packet has both the source address and the destination address of the flow. The index values are used by the fast filtering processor to rapidly find an indexed specific action of the specific actions.

It is respectfully submitted that the cited art of Merchant and Denio fails to disclose or suggest the elements of any of the above-discussed claims.

Merchant is directed to a method and apparatus for operating a network switch in a CPU-less environment. The switch is designed to receive an initialization signal and an

internal rules checker begins to process data frames based on source ad destination addresses. The Office Action correctly notes that Merchant fails to disclose a fast filtering processor filtering data coming into one data port interface and taking selective filter action based upon a filtering result.

Denio is directed to a switch that reduces broadcast traffic in a network. The Office Action alleges that the forwarding module of Denio is equivalent to the fast filtering processor claimed. However, the forwarding module "that allows the switching device 200 to filter out all broadcast traffic for specified ports." (Column 4, lines 63-65). Thus, filtering is only performed when a packet is destined for specified ports, as opposed to based on specific fields in the packet, as discussed and claimed in the instant invention.

As clarified by Applicants, claim 1 recites the limitation, "wherein monitoring flows of data comprises associating a particular packet with a previously identified flow if the particular packet has both the source address and the destination of the flow" and claims 10 and 13 recite the limitation, "wherein said index values are used by the fast filtering processor to associate a particular packet with a previously identified flow if the particular packet has both the source address and the destination of the flow." These limitations help to explain the use of the term "flow" as used in the claims, as well as help to more particularly point out and distinctly claim the invention. Neither of the cited references, Merchant or Denio disclose or suggest the use of flows, as claimed, in the processing of data.

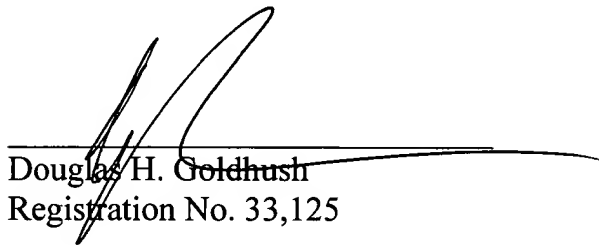
The Advisory Action had suggested that limitations of the claims in their "broadest term" were present in the references. It is respectfully submitted that the clarifying amendment submitted herewith helps to show that the claims were being considered overly broadly.

Accordingly, it is respectfully submitted that each of claims 1-15 recites subject matter that is neither disclosed nor suggested in the cited art. Therefore it is respectfully requested that all of claims 1-15 be allowed, and that this application be passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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Enclosures: RCE Transmittal
Petition for One Month Extension of Time
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